

## Claims

1. An electrode system (13) for a high-pressure discharge lamp, at least comprising an electrode, which has a pin-shaped shank (4) with a filament (5) fitted in the vicinity of the discharge-side free end and a connection part (8) connected to the shank (4), and an encircling winding (11) being fitted to the connection part, characterized in that filament (5) and winding (11) are connected to one another via a spacer (41).
2. The electrode system as claimed in claim 1, characterized in that the diameter DA of the connection part is 50% to 400% of the diameter DS of the shank.
3. The electrode system as claimed in claim 1, characterized in that filament (5) and winding (11) are separate parts which are rigidly connected to one another.
4. The electrode system as claimed in claim 1, characterized in that filament (5) and winding (11) form an integral structural unit.

5. The electrode system as claimed in claim 3 or 4, characterized in that filament and winding are connected to one another via a winding interruption (24) as the spacer.

6. The electrode system as claimed in claim 1, characterized in that the connection part is a separate part.

7. The electrode system as claimed in claim 1, characterized in that the connection part is an integral extension of the shank.

8. The electrode system as claimed in claim 7, characterized in that at least the shank consists of high-melting, electrically conductive material, preferably of tungsten or tantalum alone or predominantly of tungsten or tantalum.

9. The electrode system as claimed in claim 6, characterized in that the connection part consists of molybdenum, niobium, electrically conductive cermet alone or predominantly of one or an alloy of these materials.

10. The electrode system as claimed in claim 1, characterized in that filament (5) and winding (11) consist of the same material.

11. The electrode system as claimed in claim 1, characterized in that filament and winding consist of molybdenum and/or tungsten.

12. The electrode system as claimed in claim 1, characterized in that filament and winding have the same pitch.

13. The electrode system as claimed in claim 1, characterized in that the electrode system comprises a front piece, in which filament and winding are symmetrical with respect to one another.

14. The electrode system as claimed in claim 1, characterized in that at least one further winding or coiled formation is fitted onto the winding (11) or a part thereof.

15. The electrode system as claimed in claim 1, characterized in that the connection part forms a first part of a leadthrough.

16. The electrode system as claimed in claim 15, characterized in that the leadthrough also comprises a second, end part, which in particular is a niobium pin.

17. The electrode system as claimed in claim 1, characterized in that the connection part has substantially the same diameter as the shank, and in particular in that their diameters differ by less than 30%.

18. The electrode system as claimed in one of the preceding claims, characterized in that the diameter of the spacer is locally reduced.

19. The electrode system as claimed in claim 1, characterized in that the height of the winding (11) is reduced at the end remote from the discharge.

20. A high-pressure discharge lamp having at least one electrode system as claimed in claim 1, the lamp having a discharge vessel (2) with two ends, the electrode system being inserted into one or both of these ends of the discharge vessel, the discharge vessel (2) being produced in particular from ceramic.